FROM: Synergistic Company

Application number:

09/893,952

Application filed:

2001 June 28 Charles Vann

Applicant:

**Orientation and Position Sensor** 

Examiner:

Hien X. Vo

Date:

Title:

July 21, 2003

## **Supplemental Amendment**

Assistant Commissioner for Patents Washington, D.C. 20231

## Sir:

In response to Office communication mailed July 10, 2003, please amend claims 9—13 the above application as follows: Gancel claims 4-7. Add new claims 8—13 as follows:

8. [new] A position and orientation sensor, comprising:

an alignment target having a first optical feature a fixed distance from a second optical feature;

an imaging device that can form an optical image of said alignment target with said first feature in focus and said second feature out of focus;

whereby the location and size of said first feature compared to the location and size of said second feature in said optical image are measurements of up to three orthogonal positions and up to three orthogonal orientations of said alignment target with respect to said imaging device.